# 07\_Reducing Infections and Building Immunity: **Knowledge Encourages Prevention**

Content Area: **Science** 

Course(s):

Length:

Status:

Time Period: **Full Year** 3-4 weeks **Published** 

# **General Overview, Course Description or Course Philosophy**

This course is a university level course which tests student's knowledge of the impact of lifestyle on one's

overall health and well-being including on their physical, mental, and emotional status. It examines interventions to improve health in the areas of nutrition, physical fitness, stress management, disease prevention, and addiction use disorders. An examination by Rutgers University is required to obtain 3 college credits and an official transcript from the university.

# **OBJECTIVES, ESSENTIAL QUESTIONS, ENDURING UNDERSTANDINGS**

- The prevention methods and issues related to the most common infectious and chronic diseases in the U.S.
- It is crucial to be proactive in one's own health care and itemize key factors to consider when making health care decisions.

#### CONTENT AREA STANDARDS

SCI.HS-LS1-3 Plan and conduct an investigation to provide evidence that feedback mechanisms

maintain homeostasis.

SCI.HS-LS1-2 Develop and use a model to illustrate the hierarchical organization of interacting systems

that provide specific functions within multicellular organisms.

VHEL.9-12.9.4.12.H.14 Listen to and speak with diverse individuals to enhance communication skills.

# RELATED STANDARDS (Technology, 21st Century Life & Careers, ELA Companion **Standards are Required)**

12.9.3.HL.4 Evaluate the roles and responsibilities of individual members as part of the healthcare team and explain their role in promoting the delivery of quality health care.

# **Declarative Knowledge**

Students will understand:

- Pathogen, disease symptoms, infection pattern, treatment, and prevention methods for the most common infectious diseases
- Use of antibiotics with regard to bacterial infection and the implications of antibiotic-resistant strains of bacteria
- that antibodies battle infectious diseases
- that unwanted activities of the immune system cause allergies.
- information on organ transplants, blood transfusions, and the Rh factor

### **Procedural Knowledge**

Students will be able to:

- Define the pathogen, disease symptoms, infection pattern, treatment, and prevention methods for the most common infectious diseases
- Discuss the use of antibiotics with regard to bacterial infection and the implications of antibiotic-resistant strains of bacteria
- Explain how antibodies battle infectious diseases
- Describe how unwanted activities of the immune system cause allergies.
- Discuss organ transplants, blood transfusions, and the Rh factor

#### **EVIDENCE OF LEARNING**

#### **Formative Assessments**

- chapter reviews
- group projects
- worksheets

# **Summative Assessments**

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- Benchmarks departmental benchmark given at the end of MP1, MP2, or MP3 & MP4 b(Semester Based Course)
- o Alternative Assessments
  - Lab inquiries and investigations
  - Lab Practicals
  - Exploratory activities based on phenomenon
  - Gallery walks of student work
  - Creative Extension Projects
  - Build a model of a proposed solution
  - Let students design their own flashcards to test each other
  - Keynote presentations made by students on a topic
  - Portfolio

# **RESOURCES (Instructional, Supplemental, Intervention Materials)**

• Health and Wellness, 11th Edition

ISBN-13: 978-1449687106 ISBN-10: 1449687105

# **INTERDISCIPLINARY CONNECTIONS**

Data analysis

Informal writing

**Ethics** 

Computation

# **ACCOMMODATIONS & MODIFICATIONS FOR SUBGROUPS**See link to Accommodations & Modifications document in course folder.